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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/761,348	01/16/01	GUI	J S01.12-0695

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WM21/0706

EXAMINER

TUPPER, R

ART UNIT	PAPER NUMBER
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2652

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DATE MAILED: 07/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/761,348

Applicant(s)

GUI ET AL.

Examiner

Robert S Tupper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Claims 21-34 are rejected under 35 USC 112, first and second paragraphs, as the claimed invention is not described in such full, clear, concise, and exact terms as to enable any person skilled in the art to make and use the same, and/or for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

The specification (see page 5 lines 22-24) states that the air bearing surface includes two raised side rails and a rear center rail.

Claim 21 recites both an air bearing surface and a raised side rail. Claims 22 and 28 further recite a center rail.

It is unclear whether the term "air bearing surface" is being used differently than it is defined in the specification. It is unclear whether the side rail and center rail recited in these claims are in addition to the two side rails and one center rail stated in the specification to be included with the air bearing surface

These claims are inadequately disclosed under 112 par. 1 if claim 1 is read to encompass more or less than the two side rails and one rear center rail defined for the air bearing surface. There simply is no adequate disclosure of other rail configurations. The mere statement that other configurations could be used is not adequate disclosure.

Alternatively, these claims are indefinite and incomplete. The recitations in claim 1 conflict with the statement in the specification defining the air bearing surface. It is unclear how many rails are being claimed, and where they are located.

2. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation that the air bearing surface includes trenches is misleading and misdescriptive. The trenches are provided in the raised rails.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 21, 23, 24, 27, and 31-34 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by KASAMATSU et al (5,841,608).

Note the embodiments of figures 16 and 17. These show a slider with two rails (4), each rail having a landing pad (30), and pressure relief trenches (32) that are proximate the trailing end.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 22 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over KASAMATSU et al (5,841,608).

KASAMATSU et al shows several embodiments. The embodiment of figures 16 and 17 cited in the 102 rejection shows the two rails with landing pads and trenches, but without a center rail (re claim 28), or a center rail with a trench (re claim 22).

KASAMATSU et al shows other embodiments (note figures 19 and 20) that utilize a center rail in addition to the two side rails.

Concerning claim 28, it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the slider of KASAMATSU et al with a center rail. The motivation is as follows: the use of center rails is extremely old and well known. KASAMATSU et al shows such in the embodiments of figures 19 and 20. One skilled in the art would have provided such a center rail to fine tune the flying characteristics.

Concerning claim 22, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a trench on the center rail. The motivation is as follows: KASAMATSU et al teaches that the trench associated with the landing pad improves flying characteristics.

7. Claims 21, 23, 24, 27, 28, and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over STROM (4,802,042) in view of KASAMATSU et al.

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Note figures 3a and 3b. STROM shows two embodiments of a slider having two side rails (16,18) with trenches (42 in figure 3a, and 46 in figure 3b) and a center rail (44 in figure 3a and 40 in figure 3b).

STROM differs in not utilizing landing pads (re claim 21).

The use of landing pads is old and well known. KASAMATSU et al shows the use of landing pads.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of KASAMATSU et al to the slider of STROM to provide landing pads. The motivation is as follows: KASAMATSU et al teaches that these reduce stiction.

8. Claims 21, 22-24, 27, 28, and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over OHTSUBO (4,646,180) in view of KASAMATSU et al (5,841,608).

Note figures 6a, 6b, 9a, 9b, and 15. OHTSUBO shows a slider with two side rails (3) having pressure relief trenches (16) proximate the trailing end. The embodiment of figure 15 shows raised air bearing surfaces between the side rails that read on a center rail. The longitudinal and transverse channels in that raised center section read on the transverse and longitudinal trenches.

OHTSUBO differs in not utilizing landing pads (re claim 21).

The use of landing pads is old and well known. KASAMATSU et al shows the use of landing pads.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of KASAMATSU et al to the slider of OHTSUBO to provide landing pads. The motivation is as follows: KASAMATSU et al teaches that these reduce stiction.

9. Claims 21, 23, 24, and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over SMITH et al (5,086,360) in view of KASAMATSU et al (5,841,608).

Note figure 2. SMITH et al shows a slider with two side rails (50a), each having a pressure relief trench (32,34), one which is located proximate the trailing end.

SMITH et al differs in not utilizing landing pads (re claim 21).

The use of landing pads is old and well known. KASAMATSU et al shows the use of landing pads.

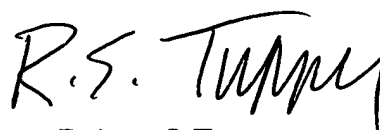
It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of KASAMATSU et al to the slider of SMITH et al to provide landing pads. The motivation is as follows: KASAMATSU et al teaches that these reduce stiction.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert S Tupper whose telephone number is 703-308-1601. The examiner can normally be reached on Mon - Fri, 6:00 AM - 3:30 PM (first Fri off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 703-305-9687. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-9051 for regular communications and 703-308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

A handwritten signature in black ink, appearing to read "R.S. Tupper". The signature is written in a cursive, flowing style.

Robert S Tupper
Primary Examiner
Art Unit 2652

RST
July 5, 2001